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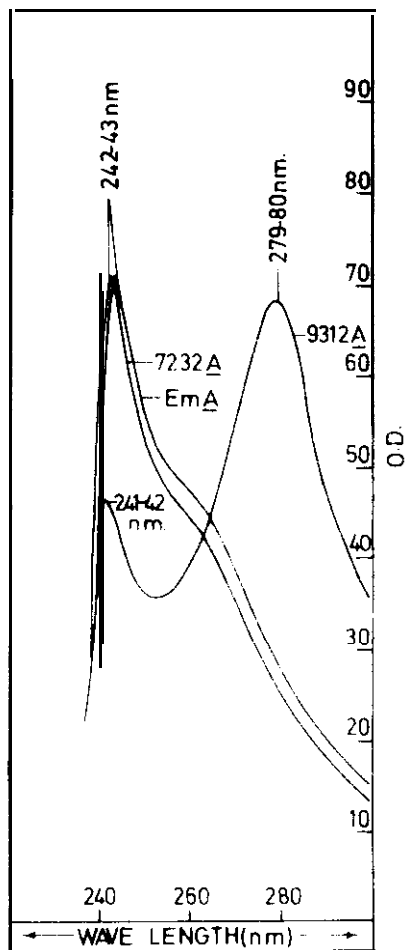
Abstract

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Sex hormones in *Neurospora crassa*. Spectrophotometric analysis of the hormonal extracts of fertile and sterile strains.

Sterility mutants were induced by irradiating conidia of wild type strain, Em. A, with gamma rays. Mutants were found to fall at different steps in the sexual developmental cycle and were placed into four different groups. Five of these mutants (242A, 270A, 278A, 366A, and 575A) belonging to the four different groups, a highly fertile strain (599A), two UV induced mutants (7232A, 9312A), and wild type Em A were selected for a UV spectrophotometric analysis of the sex hormonal substances (Islam and Weijer 1969 *Neurospora Newsl.* 15:24; Islam 1973 *Mycopath. et Mycol. Aop.* 51:87; Islam 1977 *Neurospora Newsl.* 24:5). All strains were grown as stationary cultures in Vogel's liquid minimal medium (10 ml/100 ml flask) for 15 days at a temp. of 25°C (dark), and hormones were extracted by the procedure previously described (Islam and Weijer *ibid.*; Vigfusson et al. 1971 *Folia Microbiol.* 16:166) and collected in chloroform. UV absorption patterns were determined with a Beckman spectrophotometer.

The results shown in Figure 1 demonstrate a clear qualitative difference between the absorption patterns of extracts of 9312A and wild type Em A. Quantitative differences between 366A, 575A, and wild type were also observed. Division of Genetics, Irradiation and Pest Control Research Institute, Bangladesh Atomic Energy Commission, P. O. Box 164, Ramna, Dacca, Bangladesh.

Figure 1. -- UV spectrograms of the hormonal extracts of Em A (wild type), 7232 A (sterile), and 9312 (sterile).